

## **REMARKS/ARGUMENTS**

Claims 1-30 are pending. By this Amendment, claims 1, 5, 7-8, 11-12, 21, and 27 are amended to correct minor informalities. Reconsideration in view of the above amendments and following remarks is respectfully requested.

### **I. Claim Objections**

The Office Action objected to claims 1, 5, 7-8, 11-12, 21, and 27 as lacking antecedent basis. Applicant amends claims 1, 5, 7-8, 11-12, 21, and 27 above to obviate these objections. Accordingly, Applicants request that the objection to the claims be withdrawn.

### **II. Claim Rejections Under 35 U.S.C. §102(b)**

The Office Action rejects claims 16-20 under 35 U.S.C. §102(b) as being anticipated by McDermott et al. (U.S. Patent No. 5,860,105). Applicants respectfully traverse this rejection.

Applicants assert that McDermott does not teach or suggest at least that the list structure “does not contain cache data or addresses,” as recited in independent claim 16.

On page 3, the Office Action states that Figure 4 in McDermott contains a list structure that does not contain cache data or addresses. However, McDermott’s Figure 2a shows that the cache control logic (Figure 4) is located in the L1 cache (Reference 204). (*See*, for example, col. 6, lines 57-59). According to Figure 4, the list structure (the NDIRTY array in Reference 331) is part of the cache control logic. (*See*, for example, col. 8, line 63-col. 9, line 17). Therefore, McDermott’s list structure is located in the cache and contains data that is naturally cache data. Thus, McDermott does not have a list structure that “does not contain cache data or addresses,” as recited in independent claim 16.

Therefore, Applicants assert that independent claim 16 contains allowable subject matter. Claims 17-20 depend from independent claim 16 and therefore also contain allowable subject

matter. Accordingly, Applicants request that the rejections to claims 16-20 under 35 U.S.C. §102(b) be withdrawn.

### **III. Claim Rejections Under 35 U.S.C. §103(a)**

Under 35 U.S.C. §103(a), the Office Action rejects claims 1-4, 7-12, 14, 25-27, and 29-30 over McDermott in view of Masubuchi et al. (U.S. Patent No. 6,490,657), claims 5 and 6 over McDermott in view of Masubuchi and further in view of Armilli (U.S. Patent No. 6,058,456), claim 13 over McDermott in view of Masubuchi and further in view of Otterness (U.S. Patent No. 6,460,122), claims 15 and 28 over McDermott in view of Masubuchi and further in view of Stevens (U.S. Patent No. 5,724,550), and claims 21-24 over Masubuchi in view of McDermott. Applicants respectfully traverse these rejections.

Applicants' independent claims 1 and 21 recite "a list structure for tracking a status of a plurality of cache entries, wherein said list structure is located outside a cache and wherein said list structure does not contain cache data or addresses." McDermott teaches a list structure without addresses, but as noted above, McDermott's list structure is located in the cache and contains data that is naturally cache data (*See*, for example, Figs. 2a and 4, col. 6, lines 57-59, and col. 8, line 63-col. 9, line 17).

In contrast, Masubuchi teaches a list structure located outside cache. (Figure 1). Masubuchi, however, does not teach or suggest having a list structure without addresses outside of the cache. In Masubuchi, the list structure does not need to be associated with specific cache lines because it contains addresses. (*Id.*) In McDermott, the associativity of the list structure and the cache lines is achieved easily because the list structure is in the cache.

Thus, it would not be proper to combine the teaching of McDermott and Masubuchi because the references teach away from each other. Specifically, it would not be obvious to

those of skill in the art to put a list structure without addresses outside of the cache because no means for associating the list structure to the cache lines was taught by the prior art or known to those of ordinary skill in the art.

Arimilli, Otterness, and Stevens, do not overcome the above noted deficiencies of McDermott and Masubuchi. In particular, Arimilli, Otterness, and Stevens do not teach or suggest “a list structure for tracking a status of a plurality of cache entries, wherein said list structure is located outside a cache and wherein said list structure does not contain cache data or addresses,” as recited in independent claims 1 and 21.

Therefore, Applicants assert that independent claims 1 and 21 contain allowable subject matter. Claims 2-15 and 22-24 depend from independent claims 1 and 21 respectively, and therefore also contain allowable subject matter. Accordingly, Applicants request that the rejections to claims 1-15 and 21-24 under 35 U.S.C. §103(a) be withdrawn.

With respect to independent claim 25, for similar reasons, it would not be proper to combine the teaching of McDermott and Masubuchi because the references teach away from each other. Specifically, it would not be obvious to those of skill in the art to create a table of cache entries without addresses or cache data separate from the cache because no means for associating the table to the cache lines was taught by the prior art or known to those of ordinary skill in the art.

Therefore, Applicants assert that independent claim 25 contains allowable subject matter. Claims 26-30 depend from independent claim 25, and therefore also contains allowable subject matter. Accordingly, Applicants request that the rejections to claims 25-30 under 35 U.S.C. §103(a) be withdrawn.

#### IV. Conclusion

Applicants assert that this application is in condition for allowance. Prompt and favorable action on the merits is earnestly solicited.

Should the Examiner believe there is anything further desirable to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

The Office is hereby authorized to charge any fees, or credit any overpayments, to Deposit Account No. **11-0600**.

Respectfully submitted,

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